Thank you very much for selecting Pure-Pro Water Corp. In order to bring the best use of your system, please read the user’s manual carefully before installation and follow the regulations.
Introduction of RO102

- **RO102-Manual Flushing Membrane System**
  Comply with unique RO technology and built-in manual flushing membrane, RO102 brings you premium water quality at your finger tips! With this special easy-operated built-in manual flushing membrane function that can extend the service life of the membrane and wash away carbon fines when changing filters. RO102 provides a quickest way to know the quality of your water. It is capable to remove over 95% of total dissolved solids, +99% of all organics, and +99% of all bacteria. RO105 meets all different water quality needs.

- **Specifications**
  - Production: 80 GPD / 302 LPD
  - Available in 110Volt, 220Volt or 240Volt (50/60Hz) with a transformer
  - Safety approval: TUV (EN60950) & CE MARK
  - Special technical designs (Patented No.068018. flush membrane )
  - 100% factory tested and sterilized ready for installation
  - Operation pressure: 5 - 80 PSI
  - 3.2 gallons NSF standards water storage tank
  - FDA approved polypropylene made flat cap housing (double O’ring)
  - Safety Approval: TUV (EN60950) & CE MARK
  - Automatic shut-off valve
  - Flow restrictor
  - Stainless steel check valve
  - Long reach attractive faucet
  - Feed water connector & deliver valve
  - Drain saddle valve
  - Four color coded 1/4 inch tubing for system connection
  - Completely assembled & water leaking testing
  - Dimensions: (cm) 47 (L) x 20 (W) x 42 (H) - System
    (cm) 28 (L) x 35 (W) x 28 (H) - Tank
  - Weight: 12 Kg - System
    4 Kg - Tank

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### Maintenance checking list

<table>
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<tr>
<th>Filters</th>
<th>1st stage</th>
<th>2nd stage</th>
<th>3rd stage</th>
<th>4th stage</th>
<th>5th stage</th>
<th>Other items</th>
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FAQ

Q: What is the guarantee on the Pure-Pro system?
The Pure-Pro System (excluding filters) is guaranteed for 1 year for material and workmanship. All defective parts will be replaced free within the first year under natural breakdown. The membrane has one year pro-rated guarantee.

Q: What factors affect the quantity and the quality of the water production?
There are four major variables to consider:
1. Pressure-The greater the water pressure, the better water quantity and quality it produced. Water pressure of 60 PSI is ideal.
2. Temperature-76°F is the ideal water temperature for R.O. 40°F water will cause the production of R.O. water to fall to half of that at 76°F. The maximum water temperature recommended is 85°F.
3. Total Dissolved Solids (TDS)-The higher the amount of dissolved contaminants in the water, the lower the quantity of water produced. A high level of TOTAL DISSOLVED SOLIDS can be overcome with additional water pressure.
4. Membrane-Different membranes have different characteristics. Some produce more water than others; some have better contaminant rejection capabilities; some have greater resistance to chemical abrasion for longer life. Pure-Pro system includes RE1812-70 The Thin Film Composite (TFC) membranes combine the best of these characteristics and are considered the finest membrane in the world.

Q: Can the Pure-Pro system be connected to an extra faucet?
It only takes a 1/4” tee and tubing to run the water to a refrigerator or an extra faucet. Some families run Pure-Pro system to all of their bathrooms.

Q: What does the Pure-Pro series drinking water taste like?
The taste of the Pure-Pro water depends on the amount of contaminants in the tap water originally. If 95% of dissolved minerals and chemicals are removed, the R.O. water may taste like distilled water (no minerals), bottled water (low mineral), or natural spring water (moderate mineral content).

What is reverse osmosis

Reverse osmosis was originally designed to make sea water drinkable for the navy. It is ideal for anyone on a low sodium diet. An R.O. membrane has a pore size much smaller than bacteria virus, or the cryptosporidium parasite. When functioning properly it will remove all microorganisms from tap water and produce sterile water. Reverse osmosis is the reversal of the natural flow of osmosis. In a water purification system, the goal is not to dilute the salt solution, but to separate the pure water from the salt and other contaminants. When the natural osmotic flow is reversed, water from the salt solution is forced to pass through the membrane in the opposite direction by application of pressure—thus the term REVERSE OSMOSIS. Through this process, we are able to produce pure water by screening out the salts and other contaminants.
Components & Selected filters

Components

- European ceramic faucet
- 3.2G water storage tank
- Housing wrench
- Deliver-valve
- Water supply connector
- Drain saddle
- Tank ball shut-off valve
- Four color coded 1/4 inch tubing for system connection

Selected filters

- Mineral cartridge filter
- UV water sterilizer
- Infra-red cartridge filter
- TDS meter

How to apply manual-flushing function

When need to apply this function, simply turn manual flushing switch on. Flushing for 30 seconds then turn switch back.

Suggestion for applying manual flushing function

We suggest you apply manual flushing function when:
A. This is the first time you start to use RO102 system.
B. It's time to change filters.

Applying manual flushing function regularly (once a week) is also recommended.

Cautions!

- Keep the system running when manual flushing function is on.
- Have manual flushing function on for 30 seconds.
- Do remember to turn the manual flushing switch back after finishing flushing.
**Operation regulation**

A. With everything connected, turn on the water check for leaks.
B. Make sure the storage tank shut-off valve is "OFF". Open the sink top faucet.
C. Within a few minutes (up to 15) the water will start to run from the faucet slowly.
D. Let the water run for at least 30 minutes. This flushes the carbon filters on first time use.
E. After initial flushing, open the shut-off valve on the tank and close the sink top faucet.
F. Tank will now full of water (usually 2 to 3 hours) after the tank has filled. Open the sink top faucet and drain all water until the storage tank is empty and there is only a small flow from the sink top faucet. ***DO NOT USE FIRST TANK OF WATER.***
G. Close the sink top faucet. The system is now ready for use.
H. Change filters regularly every 6 to 12 months and have the membrane checked annually.

**Caution**

1. Do not use hot water (over 45°C)!
2. Do not freeze the machine!
3. Switch off electricity and water source if away for more than 5 days, and drain out pure water.

**Cartridge Filters**

<table>
<thead>
<tr>
<th>Cartridge Filters</th>
<th>Filter Description</th>
<th>Service Life</th>
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| **Stage 1**  
5 Micron Sediment Filter | This 5micron sediment filter is made of 100% pure polypropylene fibers. High capacity filter removes dusts, particles and rusts. | 6 Months |
| **Stage 2**  
Block Carbon Filter | This block carbon filter is composed of high-performance carbon that removes free chlorine, odor, organic contaminants, pesticides and chemicals that contributed to taste and odor. | 6 Months |
| **Stage 3**  
1 Micron Sediment Filter | This 1micron sediment filter is made of 100% pure polypropylene fibers. High capacity filter removes dusts, particles and rusts. | 6 Months |
| **Stage 4**  
TFC Membrane | Made in USA. High rejection TFC type membrane with the capacity of producing 80 gallons per day. This membrane removes the following hard water contaminants that may be present in your water: lead, cooper, barium, chromium, mercury, sodium, cadmium, fluoride, nitrite, nitrate, and selenium. | 4 Years |
| **Stage 5**  
Post Carbon Filter | NSF approved. This post carbon filter is designed to improve taste. It removes any residual impurities and odors from the tank and provides a finer conditioning of pure water. | 1 Year |
Let the water run for at least 30 minutes. This flushes the carbon filters on first time use.

**Operation regulation**

1. Plug in electricity.
2. Turn on water source.
3. Switch on water tank.
4. Pump starts to function.
5. Let the water run for at least 30 minutes. This flushes the carbon filters on first time use.

**The parts of RO102**

- Post carbon filter
- Flow restrictor 300ml
- RO membrane housing
- Manual flushing
- Transformer
- Pump
- The 3rd stage housing
- The 2nd stage housing
- The 1st stage housing

**Manual flushing**

- Auto shut-off valve
- High pressure protector
- Flow restrictor 300ml
- To drain out tube
- To the faucet
- Transformer
- RO membrane housing
- Housing bracket white
- Manual flushing
- To the tank
- Post carbon filter
Change membrane

1. Unplug electricity.
2. Turn off water source.
3. Switch off water tank.
4. Loose the Joco fitting anticlockwise.
5. Remove the membrane housing cap anticlockwise.
6. Remove the membrane by a pincer.
7. Install the membrane by carefully pushing the spigot end into the socket at the far end of the housing until completely in.

To RO system

1. Unplug electricity.
2. Turn off water source.
3. Switch off water tank.
4. Loose the Joco fitting anticlockwise.
5. Remove the membrane housing cap anticlockwise.
6. Remove the membrane by a pincer.
7. Install the membrane by carefully pushing the spigot end into the socket at the far end of the housing until completely in.

Tubing connection diagram

CONNECTING THE COLOR TUBING:
A. Connect the WHITE tubing to the water supply connector.
B. Connect the BLUE tubing to the sink top faucet.
C. Connect the BLACK tubing to the drain saddle.
D. Connect the RED tubing to the storage tank.
Installation diagram

Input water: Install water tank:
1. Remove the membrane housing cap.
2. Replace the membrane.

Install European ceramic faucet:
Install drain saddle:
Drill a 1/4" hole into the drain pipe.
Mount drain saddle aligning holes.

Assemble membrane:
1. Remove the membrane housing cap.
2. Replace the membrane.

Change filters

1. Prepare a housing wrench.
2. Turn off water source. To RO system
3. Switch off water tank.
4. Unplug electricity.
5. Open housings clockwise with a wrench.
6. Put the replacement filters in the housings and double O-ring.
7. Drain out 1 gallon of water to purify replacement filters.

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